

Appl. No. 09/873,309
Amdt. Dated June 21, 2005
Reply to Office action of April 19, 2005
Attorney Docket No. P13294-US1
EUS/J/P/05-1164

REMARKS/ARGUMENTS

1.) Withdrawal of Prior Rejection

In the Office Action dated April 9, 2004, the Examiner first rejected Applicants' claims as being unpatentable over Baum, *et al.* (US 6,385,462) in view of Chuah, *et al.* (US 6,693,952). The Applicants filed a response traversing that rejection, but the Examiner issued a final rejection on December 1, 2004, stating that Applicants' arguments were "not persuasive." The Applicants responded to the final rejection with substantially the same arguments, but the Examiner issued an Advisory Action on February 24, 2005, upholding the rejection.

In view of the Examiner's Advisory Action upholding his rejection of the claims, the Applicants then filed an Appeal based wholly on the previously submitted arguments traversing the Examiner's rejection. The Examiner did not file a reply to Applicants' appeal brief, and has now issued the instant Office Action rejecting Applicants' claims on a new combination of references including Baum. The Examiner's new Office Action does not state his reasons for not answering Applicants' appeal brief, nor does it state his reasons for apparently accepting Applicants' arguments which he had previously rejected three times as being "not persuasive." In view of the time and expense incurred by the Applicants to prepare and file an appeal of the Examiner's prior rejection based on Baum, the Applicants' respectfully request that the Examiner carefully consider Applicants' arguments presented hereinafter, again traversing his rejection of the claims in view of Baum.

2.) Claim Rejections – 35 U.S.C. §103(a)

The Examiner rejected claims 1-13 and 15-20 as being unpatentable over Willenegger (US 2002/0009061) in view of Baum, *et al.* (US 6,385,462) and claim 14 over Willenegger in view of Baum and further in view of Balachandran *et al.* (US 6,567,375 B2). The Applicants traverse the rejections.

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Claim 1 recites:

1. A method of transmitting information in a radio communication system comprising at least one transmitter and at least one receiver, the method comprising the steps of:

transmitting first information in a first channel from the at least one transmitter to the at least one receiver, using in the transmitting a modulation and/or coding scheme and adapting the modulation and/or coding scheme to give a secure communication of the first information, and

transmitting second information in a second channel from the at least one transmitter to the at least one receiver and setting the power used for transmitting in the second channel to give a secure communication of the second information, wherein in the step of transmitting the first information, the choice of the modulation and/or coding scheme is controlled by the level of the power at each instant set for transmitting in the second channel. (emphasis added)

As described in Applicants' specification, the claimed invention selects a modulation and coding scheme on a shared first channel based on the instantaneous transmit power of a second channel, which is dedicated ("unique") for each user. The Applicants' invention recognizes that in some systems, such as CDMA-based systems, the dedicated channel (e.g., dedicated physical channel "DPCH") is power-controlled, and thus the signal-to-interference ratio at the receiver is, more or less, constant; i.e., no information about the varying radio channel quality is available at the receiver. Furthermore, using the transmitted power level of the dedicated (second) channel to control the modulation and coding scheme of the shared first channel, rather than the received power level, eliminates the need for feedback signaling from the receiver (e.g., mobile station) to the transmitter (e.g., base station). The Examiner has not pointed to any teaching in Willenegger or Baum that discloses those claimed features and, thus, he has failed to establish a prima facie case of obviousness.

As the Examiner notes with respect to claim 1, Willenegger does not teach a system wherein the choice of the modulation and/or coding scheme for information transmitted in a first channel is controlled by the level of the power at each instant set for transmitting in a second channel. To overcome that deficiency of Willenegger, the Examiner has looked to the teachings of Baum, asserting that Baum teaches "wherein

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in the step of transmitting the first information, the choice of the modulation and/or coding scheme is controlled by the level of the power at each instant set for transmitting in a channel (column 4, lines 19-25)." It is noted with significance, that the Examiner made this same assertion as to the teachings of Baum in his prior Final Office Action dated December 1, 2004. (FOA; page 3) Even assuming that Baum does teach what the Examiner asserts, that is not what the Applicant has claimed. The limitation of claim 1 to which the Examiner refers actually states that: "wherein in the step of transmitting the first information [on the first channel], the choice of the modulation and/or coding scheme is controlled by the level of the power at each instant set for transmitting in the second channel." (emphasis added) In other words, the transmit power of a second channel is used to control the choice of modulation and/or coding scheme on the first channel. This is not disclosed by Baum.

At column 4, lines 19-25, as referenced by the Examiner, Baum teaches: "A modulation/coding rate unit 109 assigns a modulation/coding rate to each of the planned links based on a signal quality associated with the transmit power assigned to the link." (emphasis added) In other words, Baum discloses using the signal quality associated with the transmit power assigned to a link to control the choice of modulation and/or coding scheme on that same link. This aspect of Baum is not the same as the limitation of claim 1, which recites that the transmit power of a second channel is used to control the choice of modulation and/or coding scheme on the first channel. Indeed, in the Examiner's prior Final Office Action, he essentially conceded that Baum fails to disclose that claim limitation by stating that "Baum does not specifically teach a first channel transmitting first information and a second channel transmitting second information." (FOA, page 4; emphasis added) **If Baum doesn't teach such first and second channels, then it can't teach using the transmit power of a second channel to control the choice of modulation and/or coding scheme on the first channel.** Therefore, whereas Willenegger and Baum fail to disclose the claimed limitation, the Examiner has failed to establish a *prima facie* case of obviousness of claim 1.

Appl. No. 09/873,309
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Attorney Docket No. P13294-US1
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Whereas independent claims 16 and 18 recite limitations analogous to those of claim 1, those claims are also patentable over Willenegger in view of Baum. Furthermore, whereas claims 2-13, 15 and 19 are dependent from claim 1 and claims 17 and 20 are dependent from claim 16, and includes the limitations of their respective base claims, those claims are also patentable over Willenegger in view of Baum.

With respect to the rejection of claim 14 as being unpatentable over Willenegger in view of Baum and further in view of Balachandran, the Examiner has not pointed to any teaching in Balachandran to overcome the failure of Willenegger and Baum to disclose the claimed limitation of using the transmit power of a second channel to control the choice of modulation and/or coding scheme on the first channel. Therefore, whereas claim 14 is dependent from claim 1 and includes the limitations thereof, it is also patentable over Willenegger in view of Baum and further in view of Balachandran.

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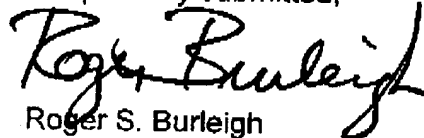
Appl. No. 09/873,309
Amdt. Dated June 21, 2005
Reply to Office action of April 19, 2005
Attorney Docket No. P13294-US1
EUS/J/P/05-1184

CONCLUSION

In view of the foregoing remarks, the Applicants believe all of the claims currently pending in the Application to be in a condition for allowance. The Applicants, therefore, respectfully request that the Examiner withdraw all rejections and issue a Notice of Allowance for claims 1-20.

The Applicants request a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,



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